

Serial Number 10/015,365  
Attorney Docket No. IMPLEX-18/ZM0718

### **Amendments to the Claims**

This listing of claims replaces all prior versions and listings of claims in this application:

#### **Claims Listing:**

1. (Currently Amended) An instrument for distracting a disc space between adjacent vertebrae and simultaneously preparing endplates of the vertebrae, the instrument comprising:

a body having opposing upper and lower surfaces separated by curved side surfaces which extend between a posterior end of the body and an anterior end of the body;

a first plurality of teeth extending across the upper surface of the body, the first plurality of teeth all disposed in a first plane, the first plurality of teeth angling back toward the anterior end of the body to provide each of the teeth with an undercut;

a second plurality of teeth extending across the lower surface of the body, the second plurality of teeth all disposed in a second plane, the second plurality of teeth angling back toward the anterior end of the body to provide each of the teeth with an undercut; and

a body thickness measured between the first and second planes that continuously decreases from the anterior end to the posterior end.

2. (Canceled)

3. (Original) The instrument according to claim 1, further comprising an inserter removably coupled to the body.

4. (Canceled)

5. (Previously Presented) The instrument according to claim 41, wherein the first and second plurality of teeth further include arcuate root surfaces.

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6. (Previously Presented) The instrument according to claim 41, wherein the wedge surfaces and the shovel surfaces intersect to define cutting edges.
7. (Previously Presented) The instrument according to claim 41, wherein the wedge surfaces are angled back at an angle of about 60°, as measured from an imaginary line extending perpendicular to an axis of the body, and the shovel surfaces are angled back at an angle of about 10°, as measured from the imaginary line.
8. (Canceled)
9. (Previously Presented) The instrument according to claim 1, wherein the continuously decreasing body thickness defines a taper angle of about 7 degrees.
10. (Original) The instrument according to claim 1, wherein the body defines a broach.
11. (Currently Amended) A system for distracting a disc space between adjacent vertebrae and simultaneously preparing endplates of the vertebrae, the system comprising:
  - at least two differently dimensioned instruments, each of the instruments including:
    - a body having opposing upper and lower surfaces separated by curved side surfaces which extend between a posterior end of the body and an anterior end of the body;
    - a first plurality of teeth extending across the upper surface of the body, the first plurality of teeth all disposed in a first plane, the first plurality of teeth angling back toward the anterior end of the body to provide each of the teeth with an undercut;
    - a second plurality of teeth extending across the lower surface of the body, the second plurality of teeth all disposed in a second plane, the second plurality of teeth

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angling back toward the anterior end of the body to provide each of the teeth with an undercut; and

a body thickness measured between the first and second planes that continuously decreases from the anterior end to the posterior end.

12. (Previously Presented) The system according to claim 11, wherein the body of each instrument having an incrementally different average body thickness.

13. (Original) The system according to claim 11, further comprising an inserter removably coupled to the body of each instrument.

14. (Canceled)

15. (Previously Presented) The system according to claim 42, wherein the first and second plurality of teeth further include arcuate root surfaces.

16. (Previously Presented) The system according to claim 42, wherein the wedge surfaces and the shovel surfaces intersect to define cutting edges.

17. (Previously Presented) The system according to claim 42, wherein the wedge surfaces are angled back at an angle of about 60°, as measured from an imaginary line extending perpendicular to an axis of the body, and the shovel surfaces are angled back at an angle of about 10°, as measured from the imaginary line.

18. (Canceled)

19. (Previously Presented) The system according to claim 11, wherein the continuously

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decreasing body thickness defines a taper angle of about 7 degrees.

20. (Original) The system according to claim 11, wherein the body defines a broach.

21. (Currently Amended) An instrument for distracting a disc space between adjacent vertebrae and simultaneously preparing endplates of the vertebrae, the instrument comprising:

a body having opposing upper and lower surfaces separated by curved side surfaces which extend between a posterior end of the body and an anterior end of the body;

a first plurality of ratcheting teeth extending across the upper surface of the body, the first plurality of teeth all disposed in a first plane;

a second plurality of ratcheting teeth extending across the lower surface of the body, the second plurality of teeth all disposed in a second plane; and

a body thickness measured between the first and second planes that continuously decreases from the anterior end to the posterior end;

wherein the first and second plurality of ratcheting teeth are angled back toward the anterior end of the body to define a plurality of undercut surfaces.

22. (Canceled)

23. (Original) The instrument according to claim 21, further comprising an inserter removably coupled to the body.

24. (Canceled)

25. (Previously Presented) The instrument according to claim 43, wherein the first and second plurality of teeth further include arcuate root surfaces.

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26. (Previously Presented) The instrument according to claim 43, wherein the wedge surfaces and the shovel surfaces intersect to define cutting edges.

27. (Previously Presented) The instrument according to claim 43, wherein the wedge surfaces are angled back toward the anterior end of the body at an angle of about 60°, as measured from an imaginary line extending perpendicular to an axis of the body, and the shovel surfaces are angled back toward the anterior end of the body at an angle of about 10°, as measured from the imaginary line.

28. (Canceled)

29. (Previously Presented) The instrument according to claim 21, wherein the continuously decreasing body thickness defines a taper angle of about 7 degrees.

30. (Original) The instrument according to claim 21, wherein the body defines a broach.

31. (Currently Amended) A system for distracting a disc space between adjacent vertebrae and simultaneously preparing endplates of the vertebrae, the system comprising:

at least two differently dimensioned instruments, each of the instruments including:

a body having opposing upper and lower surfaces separated by curved side surfaces which extend between a posterior end of the body and an anterior end of the body;

a first plurality of ratcheting teeth extending across the upper surface of the body, the first plurality of teeth all disposed in a first plane;

a second plurality of ratcheting teeth extending across the lower surface of the body, the second plurality of teeth all disposed in a second plane; and

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a body thickness measured between the first and second planes that continuously decreases from the anterior end to the posterior end;

wherein the first and second plurality of ratcheting teeth are angled back toward the anterior end of the body to provide a plurality of undercut surfaces.

32. (Previously Presented) The system according to claim 31, wherein the body of each instrument having an incrementally different average body thickness.
33. (Original) The system according to claim 31, further comprising an inserter removably coupled to the body.
34. (Canceled)
35. (Previously Presented) The system according to claim 44, wherein the first and second plurality of teeth further include arcuate root surfaces.
36. (Previously Presented) The system according to claim 44, wherein the wedge surfaces and the shovel surfaces intersect to define cutting edges.
37. (Previously Presented) The system according to claim 44, wherein the wedge surfaces are angled back at an angle of about 60°, as measured from an imaginary line extending perpendicular to an axis of the body, and the shovel surfaces are angled back at an angle of about 10°, as measured from the imaginary line.
38. (Canceled)
39. (Previously Presented) The system according to claim 31, wherein the continuously

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decreasing body thickness defines a taper angle of about 7 degrees.

40. (Original) The system according to claim 31, wherein the body defines a broach.

41. (Currently Amended) The instrument according to claim 1, wherein the first and second plurality of teeth further include posterior anterior wedge surfaces and posterior the undercuts comprise anterior shovel surfaces.

42. (Currently Amended) The system according to claim 11, wherein the first and second plurality of teeth further include posterior anterior wedge surfaces and posterior the undercuts comprise anterior shovel surfaces.

43. (Currently Amended) The instrument according to claim 21, wherein the first and second plurality of teeth further include posterior anterior wedge surfaces and posterior the undercut surfaces comprise anterior shovel surfaces.

44. (Currently Amended) The system according to claim 31, wherein the first and second plurality of teeth further include posterior anterior wedge surfaces and posterior the undercut surfaces comprise anterior shovel surfaces.

45. (Currently Amended) An instrument for distracting a disc space between adjacent vertebrae and simultaneously preparing endplates of the vertebrae, the instrument comprising:

a body having opposing upper and lower surfaces separated by curved side surfaces which extend between a posterior end of the body and an anterior end of the body;

a first plurality of teeth defined by the upper surface of the body, the first plurality of teeth all disposed in a first plane;

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a second plurality of teeth defined by the lower surface of the body, the second plurality of teeth all disposed in a second plane; and

the body having a thickness measured between the first and second planes, the thickness continuously decreasing from an anterior-most pair of the first and second plurality of teeth to a posterior-most pair of the first and second plurality of teeth;

wherein the first and second plurality of teeth are angled back toward the anterior end of the body, thus creating an undercut surface associated with each of the teeth.

46. (Currently Amended) A system for distracting a disc space between adjacent vertebrae and simultaneously preparing endplates of the vertebrae, the system comprising:

at least two differently dimensioned instruments, each of the instruments including:

a body having opposing upper and lower surfaces separated by curved side surfaces which extend between a posterior end of the body and an anterior end of the body;

a first plurality of teeth defined by the upper surface of the body, the first plurality of teeth all disposed in a first plane;

a second plurality of teeth defined by the lower surface of the body, the second plurality of teeth all disposed in a second plane; and

the body having a thickness measured between the first and second planes, the thickness continuously decreasing from an anterior-most pair of the first and second plurality of teeth to a posterior-most pair of the first and second plurality of teeth;

wherein the first and second plurality of teeth are angled back toward the anterior end of the body, thus creating an undercut surface associated with each of the teeth.